WHAT IS CLAIMED IS

1. An operation data creating method for creating operation data indicating with respect to each base station other base stations related to each base station, based on a communication quality level with respect to each base station at each local position within a service area in a mobile communication system which includes a plurality of base stations set up within the service area and a mobile station which makes a wireless communication with the base stations, said operation data creating method comprising the steps of:

creating quality information indicating the communication quality level with respect to each base station at each local position within the service area;

selecting base stations having a second or subsequent communication quality level at each local position where the same base station of interest has a highest communication quality level, based on the created quality information with respect to each base station at each local position; and

creating the operation data indicating the selected base stations as the other base stations related to the base station of interest having the highest communication quality level.

2. The operation data creating method for the mobile communication system as claimed in claim 1, wherein:

the communication quality level with respect to each base station at each local position within the service area is computed by estimation according to a predetermined algorithm, and the quality information is created based on a computed result.

3. The operation data creating method for the mobile communication system as claimed in claim 1, wherein:

the communication quality level with respect to each base station at each local position within the service area is measured, and the quality information is created based on a measured result.

4. The operation data creating method for the mobile communication system as claimed in claim 1, wherein:

one of the base stations having the second or subsequent communication quality level is selected if the same base station having the second or subsequent communication quality level at a plurality of local positions, when selecting the base stations having the second or subsequent communication quality level at each local position where the same base station of interest has the highest communication quality level.

5. The operation data creating method for

the mobile communication system as claimed in claim 1, comprising the steps of:

creating a list having the base stations arranged at positions in an order from a highest communication quality level based on the created quality information, with respect to each local position;

selecting base stations located at a second or subsequent position in each list having the same base station positioned at a first position having the highest order in each list; and

creating operation data indicating the selected base stations as the other base stations related to the base station located at the first position having the highest order in each list.

6. The operation data creating method for the mobile communication system as claimed in claim 5, wherein:

the base stations are successively selected from the positions having the higher order in each list, when selecting the base stations located at the second or subsequent position in each list having the same base station positioned at the first position having the highest order in each list, and

the operation data created indicate the selected base stations as the other base stations related to the base station at the first position having the highest order in each list, in a state where the selected base stations are arranged in the selected order.

7. The operation data creating method for the mobile communication system as claimed in claim 6, wherein:

score information corresponding to a number of the same base station located at the same position in each list is generated, when successively selecting the base stations located at the second or subsequent positions in each list having the same base station located at the first position having the highest order in each list, from the base stations located at positions having the higher order in each list, and

the operation data created indicate the selected base stations as the other base stations related to the base station at the first position having the highest order in each list, in a state where the score information is made to correspond to the same base station located at the same position in each list.

8. An operation data creating apparatus for creating operation data indicating with respect to each base station other base stations related to each base station, based on a communication quality level with respect to each base station at each local position within a service area in a mobile communication system which includes a plurality of base stations set up within the service area and a mobile station which makes a wireless communication with the base stations, comprising:

quality information creating means for creating quality information indicating the communication quality level with respect to each base station at each local position within the service area;

related base station selecting means for selecting base stations having a second or subsequent communication quality level at each local position where the same base station of interest has a highest communication quality level, based on the created quality information with respect to each base station at each local position; and

creating means for creating the operation data indicating the selected base stations as the other base stations related to the base station of interest having the highest communication quality level.

9. The operation data creating apparatus for the mobile communication system as claimed in claim 8, wherein:

said quality information creating means includes computing means for computing by estimation the communication quality level with respect to each base station at each local position within the service area according to a predetermined algorithm, and creates the quality information based on a computed result of the computing means.

10. The operation data creating apparatus for the mobile communication system as claimed in claim 8, wherein:

said quality information creating means measures the communication quality level with respect to each base station at each local position within the service area, and creates the quality

information based on a measured result.

11. The operation data creating apparatus for the mobile communication system as claimed in claim 8, wherein:

said related base station selecting means selects one of the base stations having the second or subsequent communication quality level if the same base station has the second or subsequent communication quality level at a plurality of local positions, when selecting the base stations having the second or subsequent communication quality level at each local position where the same base station of interest has the highest communication quality level.

12. The operation data creating apparatus for the mobile communication system as claimed in claim 8, wherein:

said related base station selecting means includes list creating means for creating a list having the base stations arranged at positions in an order from a highest communication quality level based on the created quality information, with respect to each local position,

base stations located at a second or subsequent position each list having the same base station positioned at a first position having the highest order in each list are selected, and

operation data indicating the selected base stations as the other base stations related to the

base station located at the first position having the highest order in each list are created.

13. The operation data creating apparatus for the mobile communication system as claimed in claim 12, wherein:

said related base station selecting means successively selects the base stations from the positions having the higher order in each list, when selecting the base stations located at the second or subsequent position in each list having the same base station positioned at the first position having the highest order in each list, and

the operation data indicating the selected base stations as the other base stations related to the base station at the first position having the highest order in each list, in a state where the selected base stations are arranged in the selected order, are created.

14. The operation data creating apparatus for the mobile communication system as claimed in claim 13, wherein:

said related base station selecting means includes score information generating means for generating score information corresponding to a number of the same base station located at the same position in each list, when successively selecting the base stations located at the second or subsequent positions in each list having the same base station located at the first position having

the highest order in each list, from the base stations located at positions having the higher order in each list, and

the operation data indicating the selected base stations as the other base stations related to the base station at the first position having the highest order in each list, in a state where the score information is made to correspond to the same base station located at the same position in each list, are created.

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15. A computer-readable storage medium which stores a program for causing a computer to carry out a process of creating operation data indicating with respect to each base station other base stations related to each base station, based on a communication quality level with respect to each base station at each local position within a service area in a mobile communication system which includes a plurality of base stations set up within the service area and a mobile station which makes a wireless communication with the base stations, said program comprising:

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a quality information creating procedure which causes the computer to create quality information indicating the communication quality level with respect to each base station at each local position within the service area;

a related base station selecting procedure which causes the computer to select base stations having a second or subsequent communication quality level at each local position where the same base station of interest has a highest communication quality level, based on the created quality

information with respect to each base station at each local position; and

a creating procedure which causes the computer to create the operation data indicating the selected base stations as the other base stations related to the base station of interest having the highest communication quality level.

16. The computer-readable storage medium as claimed in claim 15, wherein:

said quality information creating procedure includes a computing procedure which causes the computer to compute by estimation the communication quality level with respect to each base station at each local position within the service area according to a predetermined algorithm, and the quality information is created based on a computed result of the computing procedure.

17. The computer-readable storage medium as claimed in claim 15, wherein:

said quality information creating procedure causes the computer to measure the communication quality level with respect to each base station at each local position within the service area, and the quality information is created based on a measured result.

18. The computer-readable storage medium as claimed in claim 15, wherein:

said related base station selecting procedure causes the computer to select one of the base stations having the second or subsequent communication quality level in each list if the same base station has the second or subsequent communication quality level at a plurality of local positions, when selecting the base stations having the second or subsequent communication quality level at each local position where the same base station has the highest communication quality level in each list.

19. The computer-readable storage medium as claimed in claim 15, wherein:

said related base station selecting procedure includes a list creating procedure which causes the computer to create a list having the base stations arranged at positions in an order from a highest communication quality level based on the created quality information, with respect to each local position,

base stations located at a second or subsequent position each list having the same base station positioned at a first position having the highest order in each list are selected, and

operation data indicating the selected base stations as the other base stations related to the base station located at the first position having the highest order in each list are created.

20. The computer-readable storage medium as claimed in claim 19, wherein:

said related base station selecting procedure causes the computer to successively select the base stations from the positions having the higher order in each list, when selecting the base stations located at the second or subsequent position in each list having the same base station positioned at the first position having the highest order in each list, and

the operation data indicating the selected base stations as the other base stations related to the base station at the first position having the highest order in each list, in a state where the selected base stations are arranged in the selected order, are created.

21. The computer-readable storage medium as claimed in claim 20, wherein:

said related base station selecting procedure includes a score information generating procedure which causes the computer to generate score information corresponding to a number of the same base station located at the same position in each list, when successively selecting the base stations located at the second or subsequent positions in each list having the same base station located at the first position having the highest order in each list, from the base stations located at positions having the higher order in each list, and

the operation data indicating the selected base stations as the other base stations related to the base station at the first position having the highest order in each list, in a state where the

score information is made to correspond to the same base station located at the same position in each list, are created.

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